

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1

of 5

Compleat if Known

Application Number

Filing Date

Even Date Herewith

First Named Inventor

Shlomo YITZCHAIK

Group Art Unit

Examiner Name

Attorney Docket Number

YITZCHAIK =1A

U.S. PATENT DOCUMENTS

Examiner Initials [*]	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	AA	4,342,945		KETCHPEL	08-03-1982	
	AB	4,391,888		CHANG et al	07-05-1983	
	AC	4,690,750		ROXLO et al	09-01-1987	
	AD	4,703,096		CHOE	10-27-1987	
	AE	4,746,181		HAYAKAWA et al	05-24-1988	
	AF	4,859,625		MATSUMOTO	08-22-1989	
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	AL	5,254,207		NISHIZAWA et al	10-19-1993	
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	AN	5,284,779		MIYANGA	02-08-1994	
	AO	5,296,403		NISHIZAWA et al	03-22-1994	
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	BA	5,614,435		PETROFF et al	03-25-1997	
	BB	5,623,476		EGUCHI et al	04-22-1997	
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	BE	5,677,545		SHI et al	10-14-1997	
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	BI	5,693,862		SHI et al	12-02-1997	
	BJ	5,707,745		FORREST et al	01-13-1998	

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Filing Date	Even Date Herewith
		First Named Inventor	Shlomo YITZCHAIK
		Group Art Unit	1711
		Examiner Name	
Sheet 2	of 5	Attorney Docket Number	YITZCHAIK =1A

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	BK	AGRANOVICH et al, "Fermi resonance interface modes in organic multilayer structures", <u>Chem Phys Lett</u> 210(4,5,6):458-462 (1993)	
	BL	ANDERSON et al, "Synthesis and Third-Order Nonlinear Optical Properties of a Conjugated Porphyrin Polymer", <u>Angew Chem Int Ed Eng</u> 33(6):655-657 (1994)	
	BM	BIRD et al, "Velocity Distributions in Laminar Flow", in <u>Transport Phenomena</u> Wiley, New York, NY, Chapter 2, pp. 34-70 (1960)	
	BN	BRAUN et al, "Visible light emission from semiconducting polymer diodes", <u>Appl Phys Lett</u> 58:1982-1984 (1991)	
	BO	BRAUN et al, "Electroluminescence and electrical transport in poly(3-octylthiophene)", <u>J Appl Phys</u> 72(2):564-568 (1992)	
	BP	BURN et al, "Chemical tuning of electroluminescent copolymers to improve emission efficiencies and allow patterning", <u>Nature</u> 356:47-49 (1992)	
	BQ	BURROUGHES et al "Light-emitting diodes based on conjugated polymers", <u>Nature</u> 347:539-541 (1990)	
	BR	CHEMLA et al, "Room Temperature Excitonic Nonlinear Absorption and Refraction in GaAs/AlGaAs Multiple Quantum Well Structures", <u>IEEE J Quantum Electron</u> QE-20:265-275 (1984)	
	BS	DONOVAN et al, "Determination of anisotropic electron transport properties of two Langmuir-Blodgett organic multiple quantum wells", <u>Thin Solid Films</u> 244:110-114 (1993)	
	BT	DONOVAN et al, "Determination of the parallel and perpendicular intermolecular tunneling rates in two Langmuir-Blodgett quantum well systems" <u>Thin Solid Films</u> 232:923-927 (1994)	
	BU	FORREST et al, "Ultrahigh-vacuum quasiepitaxial growth of model van der Waals thin films. II. Experimental", <u>Phys Rev B</u> 49(16):11309-11321 (1994)	
	BV	GREENHAM et al, "Efficient light-emitting diodes based on polymers with high electron affinities", <u>Nature</u> 365:628-630 (1993)	

Examiner Signature		Date Considered	6/8/04
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Sheet 3

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Application Number	
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Group Art Unit	1711
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Attorney Docket Number	YITZCHAIK =1A

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	BW	HASKAL et al, "Finite size effects observed in the fluorescence of ultrathin crystalline organic films grown by organic molecular beam deposition", <u>Chem Phys Lett</u> 219:325-330 (1994)	
1	BX	HASKAL et al, "Excitons and exciton confinement in crystalline organic thin films grown by organic molecular-beam deposition", <u>Phys Rev B</u> 51:4449-4462 (1995)	
	BY	HIRAMOTO et al, "Directed beam emission from film edge in organic electroluminescent diode", <u>Appl Phys Lett</u> 62(7):666-668 (1993)	
	BZ	HONG et al, "Possible evidence for quantum-size effects in self-assembled ultrathin films containing conjugated copolymers", <u>Appl Phys</u> 79(6):3082-3088 (1996)	
	CA	JENEKHE et al, "Excimers and Exciplexes of Conjugated Polymers", <u>Science</u> 265:765-768 (1994)	
	CB	KIDO et al, "Bright blue electroluminescence from poly (N-vinylcarbazole)", <u>Appl Phys Lett</u> 63(19):2627-2629 (1993)	
	CC	KIDO et al, "White light-emitting organic electroluminescent devices using the poly(N-vinylcarbazole) emitter layer doped with three fluorescent dyes", <u>Appl Phys Lett</u> 64:815-817 (1994)	
	CD	KUBONO et al, "Polymer Thin Films Prepared by Vapor Deposition", <u>Prog Polym Sci</u> 19:389-438 (1994)	
	CE	LAM et al, "Optical Nonlinearities in Crystalline Organic Multiple Quantum Wells", <u>Phys Rev Lett</u> 60(12):1614-1617 (1991)	
	CF	LI et al, "Chromophoric Self-Assembled Multilayers. Organic Superlattice Approaches to Thin-Film Nonlinear Optical Materials", <u>J Am Chem Soc</u> 112:7389-7390 (1990)	
	CG	MARUO et al, "Surface characterization of fluorinated polyimide films grown by vapor deposition polymerization, <u>J Vac Soc Technol A</u> 11(5):2590-2596 (1993)	
	CH	NAIWA HS, "Organic Materials for Third-Order Nonlinear Optics", <u>Adv Mater</u> 5(5):341-358 (1993)	

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SignatureDate
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6/8/04

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✓	CI	OHMORI et al, "Observation of spectral narrowing and emission energy shift in organic electroluminescent diode utilizing 8-hydroxyquinoline aluminum/aromatic diamine multilayer structure", <u>Appl Phys Lett</u> 63(14):1871-1873 (1993)	
	CK	OSAHENI et al, "Efficient Blue Luminescence of a Conjugated Polymer Exciplex", <u>Macromolecules</u> 27:739-742 (1994)	
	CL	PESSA et al, "Characterization of surface exchange reactions used to grow compound films", <u>Appl Phys Lett</u> 38(3):131-132 (1981)	
	CM	SHIROTA et al, "Multilayered organic electroluminescent device using a novel starburst molecule, 4,4',4"-tris(3-methylphenylphenylamino)triphenylamine, as a hole transport material", <u>Appl Phys Lett</u> 65(7):807-809 (1994)	
	CN	SO et al, "Quasi-epitaxial growth of organic multiple quantum well structures by organic molecular beam deposition", <u>App Phys Lett</u> 56(7):674-676 (1990)	
	CO	SO et al, "Growth and Characterization of Organic Semiconductor Heterojunctions and Multiple Quantum Wells", <u>SPIE</u> 1285:95-103 (1990)	
	CP	SO et al, "Evidence for Exciton Confinement in Crystalline Organic Multiple Quantum Wells", <u>Phys Rev Lett</u> 66(20):2649-2652 (1991)	
	CQ	TAKAHASHI et al, "Preparation of Ultrathin Films of Aromatic Polyamides and Aromatic Poly(amide-imides) by Vapor Deposition Polymerization" <u>Macromolecules</u> 24:3543-3546 (1991)	
	CR	TANAKA et al, "Doping effect on organic semiconductive thin film by plasma polymerization of 3,4,9,10-perylenetetracarboxylic dianhydride", <u>Synthetic Metals</u> 65:81-84 (1994)	
	CS	TATSUURA et al, "Electro-optic polymer waveguide fabricated using electric-field-assisted chemical vapor deposition", <u>Appl Phys Lett</u> 60(14):1661-1663 (1992)	
	CT	ULMAN A, "Formation and Structure of Self-Assembled Monolayers", <u>Chem Rev</u> 96:1533-1554 (1996)	
✓	CU	WANG et al, "Dependence on Piezoelectric and Pyroelectric Activities of Aromatic Polyurea Thin Films on Monomer Composition Ratio", <u>Jap J Appl Phys</u> 32:2768-2773 (1993)	

Examiner Signature	<i>Doc [Signature]</i>	Date Considered	6/8/04
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	CV	YITZCHAIK S, "Chromophoric Self-Assembled NLO Multilayer Materials. Real Time Observation of Monolayer Growth and Microstructural Evolution by <i>in Situ</i> Second Harmonic Generation Techniques", <u>J Phys Chem</u> 97:6958-6960 (1993)	
	CW	YOSHIMURA et al, "Polymer films formed with monolayer growth steps by molecular layer deposition", <u>Appl Phys Lett</u> 59(4):482-484 (1991)	
	CX	YOSHIMURA et al, "Quantum wire and dot formation by chemical vapor deposition and molecular layer deposition of one-dimensional conjugated polymer", <u>Appl Phys Lett</u> 60(3):268-270 (1992)	
	CY	ZAKHIDOV et al, "Polarization double barriers at the interfaces in organic multilayered structures and superlattices", <u>Synthetic Metals</u> 64:155-165 (1994)	

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